

Siemens and Reinhausen are developing power solutions for AI data centers

- **The two companies are developing a solid-state transformer for direct current applications in AI-ready data centers**
- **The modular transformer connects to grid voltage of up to 36 kV**
- **Increased availability while reducing footprint and cost**

Siemens and Reinhausen are advancing the future of power solutions for the AI era through a strategic partnership. Together, the companies are developing and going to industrialize a solid-state transformer (SST) for up to 36 kV grid voltage. The technology is going to be developed for the deployment in AI data centers.

AI is driving a fundamental transformation of data center infrastructure. The industry is moving from traditional power architectures towards more efficient and scalable solutions capable of supporting the next generation of AI workloads. SSTs are one of the key building blocks of that transition. They enable higher efficiency, direct grid-to-rack DC conversion, and a reduced footprint. By responding to load changes in milliseconds, they seamlessly handle the extreme power swings of AI training workloads avoiding downtime while cutting costs.

A medium-voltage SST provides a compact and efficient alternative to conventional multistage AC/DC power-conversion architectures, enabling a more efficient power delivery to high-density AI infrastructures.

Reinhausen is the world's leading manufacturer of voltage regulation technology for power transformers and has decades of experience in power quality and grid stability. The company has also developed extensive know-how in the field of

medium voltage power electronics and related components, which are at the heart of modern SST architectures.

Siemens combines deep expertise in power electronics, electrical power solutions, grid protection and automation systems as well as digitalization. In the deployment of SSTs, Siemens applies its capabilities in grid integration, power conversion, protection and control to deliver the next-generation energy systems for AI data centers.

Key features of the offering include modularity, scalability, and high availability. The design supports operation up to 36 kV AC and can be modularly applied to lower voltages, making the architecture scalable for different grid-connection conditions. The SST delivers a stable 800 VDC output typically required by AI-enabled data centers.

This press release is available at <https://sie.ag/6SkUED>

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In fiscal 2025, which ended on September 30, 2025, the Siemens Group generated revenue of €78.9 billion and net income of €10.4 billion. As of September 30, 2025, the company employed around 318,000 people worldwide on the basis of continuing operations. Further information is available on the Internet at www.siemens.com.